IN THE CLAIMS

Please amend claims 1, 5-11, and 13-81 as follows:

Claim 1. (Currently Amended) A method for ~~quickly and reliably transmitting~~ controlling a transmission of a ~~byte~~ data stream from a sending node to a receiving node in a data communication network, the method comprising:

(a) initially transmitting ~~a predetermined number of credits~~ first information defining a first unique range of data from a receiving node to a sending node, said ~~initially transmitted credits~~ first information authorizing transmission of a first quantity of data from said sending node ~~of a~~ represented by a quantity of data within said first unique range of data ~~bytes~~ of a data ~~byte~~ stream;

(b) transmitting data ~~said first unique range of bytes~~ of said ~~byte~~ data stream defined by said first information from a buffer disposed at said sending node to said receiving node;

(c) transmitting ~~an additional, predetermined number of credits~~ second information defining a second unique range of data from said receiving node to said sending node when ~~a predetermined~~ an event occurs, said ~~additional predetermined number of credits~~ second information authorizing transmission of a second quantity of data from said sending node represented by a quantity of data within said second unique range of data ~~bytes~~ of said data ~~byte~~ stream; and

(d) releasing at least a portion of said buffer at the sending node corresponding to said first unique range of data on receiving said second information ~~bytes upon occurrence of said predetermined event~~.

Claims 2 - 5 (Cancelled).

Claim 6 (Currently Amended). The method of claim 1, wherein said releasing step occurs in response to at least one predetermined event ~~is~~ selected one from the group consisting of ~~events~~:

a) at least one of said first unique range of bytes and said second unique range of bytes from said byte stream is received at said receiving node,

b) at least one of said first unique range of bytes and said second unique range of bytes from said byte stream is received at said receiving node and a congestion indicator at said receiver node is less than a predetermined threshold,

c) at least one of said first unique range of bytes and said second unique range of bytes from said byte stream is received at said receiving node and a data error indicator at said receiver node is less than a predetermined threshold,

d) a buffer disposed at said receiving node , and containing said at least one of said first unique range of bytes and said second unique range of bytes has free space,

e) a buffer disposed at said receiving node , and containing said at least one of said first unique range of bytes and said second unique range of bytes has free space and a congestion indicator at said receiver node is less than a predetermined threshold, and

f) a buffer disposed at said receiving node, and containing at least one of said first unique range of bytes and said second unique range of bytes has free space and a data error indicator at said receiver node is less than a predetermined threshold.

Claim 7 (Currently Amended). The method of claim 1, wherein the reception of said ~~additional, predetermined number of credits~~ second information at said sending node indicates that at least a subset of said byte stream was correctly received at said receiving node.

Claim 8 (Currently Amended). The method of claim 1, wherein said step of transmitting of said ~~additional predetermined number of credits~~ second information is dependent upon a state of a counter which counts of a number of bytes ~~counter exceeding a predetermined number representative of~~ received ~~bytes~~ at said receiving node, wherein at least one of said initially transmitting first information step (a) and said transmitting second information step (c) comprise transmitting a predetermined number of credits from said receiving node to said sending node when said counter is equal to at least a predetermined value and decrementing said counter by ~~said byte size~~ the number of credits transmitted ~~upon transmission of said credits~~.

Claim 9 (Currently Amended). The method of claim 1, wherein at least one of said information defining the first unique range of data and said information defining the second unique range of data is adaptive to ~~credits from said credit transmission of at least one of said~~

~~initially transmitting step (a) and said transmitting step (c) are reduced or delayed to reflect~~ congestion ~~detection~~ detected in said data communication network, to reduce a data a size of the range of data in response to increasing congestion.

Claim 10 (Currently Amended) The method of claim 1, wherein said transmitting of said data of said stream ~~first unique range of bytes step (b)~~ is dependent upon a state of a counter, wherein said counter decrements in response to an amount of data transmitted, and incremented by an amount of data represented by a range of data authorized ~~exceeding a predetermined number representative of received credits at said sending node~~, said transmitting data step (b) comprises the sub-steps of:

i) transmitting said first unique range of ~~bytes~~ data from said sending node to said receiving node when said counter is equal to at least said first quantity of data ~~number first unique range of bytes~~; and

ii) decrementing said counter by said number said first unique range of data ~~bytes~~ upon said transmission thereof.

Claim 11 (Currently Amended). The method of claim 1, wherein said data ~~bytes~~ transmitted in said initially transmitting first information step (a) and said transmitting second information step (c) are in a ~~the~~ form compatible with ~~of~~ Transmission Control Protocol (TCP) packets, whereby said method is compatible at the application programming interface (API) level with TCP.

Claim 12 (Cancelled)

Claim 13 (Currently Amended). The method of claim 79, ~~the steps~~ further comprising the step of:

~~d)~~ f) resetting said data communication network when said transmission of ~~at least one of~~ said negative ~~acknowledgements~~ acknowledgement occurs maximum of a predetermined number of times.

Claim 14 (Currently Amended). The method of claim 1, wherein ~~at least one of said~~

~~initially transmitting step (a) and said transmitting step (c) of~~ said first or second information authorizing transmission of a first or second quantity of data is transmitted ~~predetermined number of credits occurs~~ by piggybacking existing traffic with said first or second information ~~credits~~ from said receiving node to said sending node.

Claim 15 (Currently Amended). The method of claim 1, wherein said first information or second information ~~predetermined number of credits in at least one of said initially transmitting step (a) and said credit transmission step (c)~~ are not retransmitted if they are lost during transmission.

Claim 16 (Currently Amended). The method of claim 79, wherein said ~~predetermined number of~~ negative ~~acknowledgements~~ acknowledgement is transmitted in response to a predetermined event.

Claim 17 (Currently Amended). The method of claim 79, wherein said at least one lost or corrupted ~~byte~~ datum is detected by means of error detection hardware only.

Claim 18 (Currently Amended). The method of claim 79, wherein said at least one lost or corrupted ~~byte~~ datum is detected only by software means for detecting errors.

Claim 19 (Currently Amended). A method for ~~quickly and reliably~~ transmitting a ~~byte~~ data stream from a sending node ~~having credits indicating a predetermined range of bytes from said byte stream to be transmitted, and an established connection to~~ a receiving node in a communication network having a plurality of nodes and with a plurality of interconnectable paths, wherein said ~~predetermined range of bytes~~ data are formed into a plurality of data packets in accordance with a predetermined protocol, the method comprising:

a) providing a predetermined identifier associated with data packets;

b) determining the predetermined identifier associated with a packet, and

c) if said predetermined identifier indicates a first transport system comprising a specified range of data credit and negative acknowledgement-based ~~first~~ transport system:~~,~~

(i) transmitting credits from a receiving node to a sending node responsive to occurrence

of an event, said credits specifying a second unique range of data to be transmitted;

~~b)~~ (ii) transmitting a ~~predetermined~~ specified range of ~~bytes~~ data of a ~~byte~~ data stream from ~~a~~ said sending node to ~~a~~ said receiving node, corresponding to a range of ~~bytes~~ data specified in credits ~~present at said~~ received by said sending node from said receiving node;

~~c) (ii) transmitting a predetermined number of credits from said receiving node to said sending node when a predetermined event occurs, said credits specifying a second unique range of bytes to be transmitted;~~ and

~~d)~~ (iii) transmitting ~~a predetermined number of~~ at least one negative ~~acknowledgements~~ acknowledgement from said receiving node to said sending node, ~~when one of said transmitted bytes is lost or corrupted~~ specifying data for retransmission.

Claim 20 (Currently Amended). The method of claim 19, ~~the steps~~ further comprising the steps of:

~~e)~~ d) if said predetermined identifier indicates a second transport system that ~~is not exclusively~~ differ from said first transport system ~~credit and negative acknowledgement based~~, processing said data stream by ~~a~~ in accordance with said second transport system ~~independent of credit and negative acknowledgements~~, whereby compatibility at the application programming interface (API) level of said first transport system and said second transport system is maintained.

Claim 21 (Currently Amended). The method of claim 19, the steps further comprising:

~~e)~~ d) providing a first packet filter for filtering data packets at a sending node; and

~~f)~~ e) providing a second packet filter for filtering data packets at a receiving node, so that said predetermined identifier indicates a credit and negative acknowledgement transport system dependent on said first and second packet filters.

Claim 22 (Currently Amended). The method of claim 19, the steps further comprising:

~~e)~~ d) retransmitting at least once, from said sending node to said receiving node, data specified by said at least one negative acknowledgement, ~~said at least one of said lost or corrupted bytes corresponding to said predetermined number of negative acknowledgments~~ received at said sending node.

Claim 23 (Currently Amended). The method of claim 19, wherein said step (~~e~~ i) of transmitting said ~~predetermined number of~~ credits from said receiving node to said sending node occurs before said step (ii) of transmitting said specified range of data ~~predetermined number of bytes~~ of said ~~byte~~ data stream ~~step (b)~~.

Claim 24 (Currently Amended). The method of claim 23, wherein ~~said~~ an initial transmitting of said ~~predetermined number of~~ credits step (~~e~~ i) occurs during a connection establishment of said sending node and said receiving node.

Claim 25 (Currently Amended). The method of claim 23, wherein said transmitting of said ~~predetermined number of~~ credits step (~~e~~ i) occurs after a connection establishment of said sending node and said receiving node.

Claim 26 (Currently Amended). The method of claim 19, wherein said ~~predetermined~~ event is one from the group of

a) a predetermined ~~number~~ amount of ~~bytes~~ data from said ~~byte~~ data stream is received at said receiving node,

b) a predetermined ~~number~~ amount of ~~bytes~~ data from said ~~byte~~ data stream is received at said receiving node and a congestion indicator at said ~~receiver~~ receiving node is less than a ~~predetermined~~ threshold,

c) a predetermined ~~number~~ amount of ~~bytes~~ data from said ~~byte~~ data stream is received at said receiving node and a data error indicator at said ~~receiver~~ receiving node is less than a predetermined threshold,

d) a buffer at said receiving node, containing ~~said bytes~~ data transmitted from said sending node to said receiving node, has free space,

e) a buffer at said receiving node, containing ~~said bytes~~ data transmitted from said sending node to said receiving node, has free space and a congestion indicator at said ~~receiver~~ receiving node is less than a predetermined threshold, and

f) a buffer at said receiving node, containing ~~said bytes~~ data transmitted from said sending node to said receiving node, has free space and a data error indicator at said ~~receiver~~ receiving node is less than a predetermined threshold.

Claim 27 (Currently Amended). The method of claim 19, wherein the reception of said credits at said ~~receiving~~ sending node indicates that at least a subset of said byte stream was correctly received at said receiving node.

Claim 28 (Currently Amended). The method of claim 19, wherein said transmitting of said ~~predetermined number of~~ credits step (~~e~~ i) is dependent upon a counter at said receiving node exceeding a predetermined number representative of an amount of data received ~~bytes~~ at said receiving node, said transmitting step (~~e~~ i) comprising the sub-steps of:

~~i)~~ transmitting a ~~predetermined~~ number of credits from said receiving node to said sending node when said counter is equal to at least a predetermined value; and

~~ii)~~ decrementing said counter by said ~~byte size~~ amount of data upon transmission of said credits.

Claim 29 (Currently Amended). The method of claim 19, wherein said credits from said transmitting credit ~~transmission~~ step (~~e~~ i) are reduced or delayed to reflect congestion detection in said data communication network.

Claim 30 (Currently Amended) The method of claim 19, wherein said transmitting of said specified range of data ~~predetermined number of bytes~~ step (~~b~~ ii) is dependent upon a counter exceeding a predetermined number representative of received credits at said sending node, said transmitting step (~~b~~ ii) including the sub-steps of:

~~i)~~ transmitting said ~~bytes~~ data from said sending node to said receiving node when said counter is equal to at least said number of bytes; and

~~ii)~~ decrementing said counter by said number of bytes upon said transmission of said bytes.

Claim 31 (Currently Amended). The method of claim 19, wherein said ~~bytes~~ data transmitted in said ~~byte~~ transmission step (~~b~~ ii) are in ~~the~~ a form ~~of~~ compatible with Transmission Control Protocol (TCP) packets, whereby said method is compatible at the application programming interface (API) level with TCP.

Claim 32 (Currently Amended). The method of claim 19, wherein the established connection between said sending node and said receiving node is established using ~~the~~ a standard 3-way handshake of Transmission Control Protocol (TCP).

Claim 33 (Currently Amended). The method of claim 19, the steps further comprising:

~~c)~~ d) resetting ~~said established~~ a connection between said sending node and said receiving node when said transmission of at least one of said negative acknowledgements occurs a predetermined number of times.

Claim 34 (Currently Amended). The method of claim 19, wherein said transmitting of said ~~predetermined number of~~ credits step (~~c~~ ii) occurs by piggybacking said credits with existing traffic from said receiving node to said sending node.

Claim 35 (Currently Amended). The method of claim 19, wherein said credits in said transmitting credits ~~credit transmission~~ step (i) are not retransmitted if they are lost.

Claim 36 (Currently Amended) The method of claim 19, wherein said at least one ~~predetermined number of~~ negative ~~acknowledgements~~ acknowledgement is transmitted upon occurrence of at least one predetermined event ~~events~~.

Claim 37 (Currently Amended) The method of claim 19, wherein said at least one negative acknowledgement specifies at least one corrupted byte for retransmission based exclusively on a signal generated by ~~is detected by means of~~ error detection hardware ~~only~~.

Claim 38 (Currently Amended). The method of claim 19, wherein said at least one negative acknowledgement specifies at least one datum for retransmission, after detection ~~corrupted byte is detected only once by software error detection means~~.

Claim 39 (Currently Amended). A system for ~~quickly and reliably~~ transmitting a ~~byte~~ data stream from a sending node to a receiving node in a data communication network, comprising:

a) means for transmitting a ~~predetermined first~~ range of ~~bytes~~ data of a ~~byte~~ data stream from a sending node to a receiving node, said ~~predetermined first~~ range of ~~bytes~~ data ~~corresponding to~~ being specified by a ~~first~~ range of ~~bytes specified in~~ data credits present at said sending node;

b) means for transmitting a ~~second predetermined~~ number of data credits ~~corresponding to~~ specifying a ~~second~~ the range of ~~bytes~~ data of said ~~byte~~ data stream from said receiving node to said sending node ~~when a predetermined~~ upon occurrence of at least one event ~~occurs~~; and

c) means for transmitting ~~a predetermined number of~~ at least one negative ~~acknowledgements~~ acknowledgement from said receiving node to said sending node, when at least one transmitted ~~byte~~ datum is lost or corrupted.

Claim 40 (Currently Amended). The system of claim 39, further comprising:

d) means for retransmitting at least once, from said sending node to said receiving node, said at least one lost or corrupted ~~byte~~ datum corresponding to said ~~predetermined number of~~ at least one negative ~~acknowledgments~~ acknowledgement received at said sending node.

Claim 41 (Currently Amended). The system of claim 39, wherein said means for transmitting said ~~predetermined~~ number of data credits from said receiving node to said sending node transmits said ~~predetermined~~ number of data credits before the transmission of said ~~predetermined number of bytes~~ data of said ~~byte~~ data stream.

Claim 42 (Currently Amended). The system of claim 41, wherein said transmission of said ~~predetermined~~ number of credits occurs during a connection establishment of said sending node and said receiving node.

Claim 43 (Currently Amended). The system of claim 41, wherein said transmission of said ~~predetermined~~ number of credits occurs after a connection establishment of said sending node and said receiving node.

Claim 44 (Currently Amended). The system of claim 39, wherein said ~~predetermined~~ at

least one event is ~~one~~ selected from the group of one or more of:

a) a predetermined ~~number of bytes~~ amount of data from said ~~byte~~ data stream is received at said receiving node,

b) a predetermined ~~number of bytes~~ amount of data from said ~~byte~~ data stream is received at said receiving node and a congestion indicator at said receiver node is less than a predetermined threshold,

c) a predetermined ~~number of bytes~~ amount of data from said ~~byte~~ data stream is received at said receiving node and a data error indicator at said receiver node is less than a predetermined threshold,

d) a buffer at said receiving node, containing said ~~bytes~~ data transmitted from said sending node to said receiving node, has free space,

e) a buffer at said receiving node, containing said ~~bytes~~ data transmitted from said sending node to said receiving node, has free space and a congestion indicator at said receiver node is less than a predetermined threshold, and

f) a buffer at said receiving node, containing said ~~bytes~~ data transmitted from said sending node to said receiving node, has free space and a data error indicator at said receiver node is less than a predetermined threshold.

Claim 45 (Currently Amended). The system of claim 39, wherein the reception of said credits at said receiving node indicates that at least a subset of said ~~byte~~ data stream was correctly received at said receiving node.

Claim 46 (Currently Amended) The system of claim 39, wherein said means for transmitting ~~of said predetermined~~ a number of data credits is dependent upon a counter exceeding a ~~predetermined~~ number representative of an amount of data received ~~bytes~~ at said receiving node, said means for transmitting comprising:

i) means for transmitting a ~~predetermined~~ number of data credits from said receiving node to said sending node when said counter is equal to at least a predetermined value; and

ii) means for decrementing said counter by an amount corresponding to the number of data credits transmitted ~~said byte size~~ upon transmission of said data credits.

Claim 47 (Currently Amended). The system of claim 39, wherein said data credits from said means for transmitting a number of data credits ~~credit transmission~~ are reduced or delayed to reflect congestion detection in an established connection.

Claim 48 (Currently Amended). The system of claim 39, wherein said means for transmitting a range of data ~~of said predetermined number of bytes~~ is dependent upon whether a counter ~~exceeding~~ exhausts a ~~predetermined~~ number representative of received data credits at said sending node, said means for transmitting comprising:

i) means for transmitting said ~~bytes~~ data from said sending node to said receiving node when said counter is equal to at least a threshold value ~~said number of bytes~~; and

ii) means for decrementing said counter ~~by said number of bytes~~ based upon an amount of data transmitted ~~said transmission of said bytes~~.

Claim 49 (Currently Amended). The system of claim 39, wherein said ~~bytes~~ data transmitted by said ~~byte transmission~~ means for transmitting a range of data are in ~~the~~ a form compatible with ~~of~~ Transmission Control Protocol (TCP) packets, whereby said system is compatible at the application programming interface (API) level of TCP.

Claim 50 (Currently Amended). The system of claim 39, wherein ~~the established~~ a connection between said sending node and said receiving node is established using ~~the~~ a standard 3-way handshake of Transmission Control Protocol (TCP).

Claims 51 (Currently Amended). The system of claim 39, further comprising:

d) means for resetting ~~said~~ an established connection when said transmission of at least one ~~of said~~ negative ~~acknowledgements~~ acknowledgement for a given datum occurs a predetermined number of times.

Claim 52 (Currently Amended). The system of claim 39, wherein said means for transmitting ~~of~~ said ~~predetermined~~ number of data credits is configured and adapted to piggyback said data credits with existing traffic from said receiving node to said sending node.

Claim 53 (Currently Amended). The system of claim 39, wherein said data credits in said ~~credit transmission~~ means for transmitting a number of data credits are not retransmitted if they are lost.

Claim 54 (Currently Amended). The system of claim 39, wherein said ~~predetermined number of~~ at least one negative ~~acknowledgements~~ acknowledgement is transmitted ~~at~~ upon occurrence of predetermined events.

Claim 55 (Currently Amended). The system of claim 39, wherein said at least one corrupted datum ~~byte~~ is detected by means of error detection hardware only.

Claim 56 (Currently Amended). The system of claim 39, wherein said at least one corrupted ~~byte~~ datum is detected only once by software error detection means.

Claim 57 (Currently Amended). A system for ~~quickly and reliably~~ transmitting a ~~byte~~ data stream from a sending node having credits indicating a ~~predetermined number of bytes~~ an amount of data from said ~~byte~~ data stream to be transmitted ~~and~~ over an established connection to a receiving node in a communication network having a plurality of nodes and with a plurality of interconnectable paths, and wherein said predetermined ~~range of bytes are~~ amount of data is formed into a plurality of data packets in accordance with a predetermined protocol, the system comprising:

a) a predetermined identifier associated with said data packets;

b) ~~means~~ a first transmitter for transmitting ~~a predetermined number of bytes~~ an amount of data of a ~~byte~~ data stream from a sending node to a receiving node, corresponding to a range of data specified by ~~the number of~~ credits present at said sending node, if said predetermined identifier indicates implementation of a credit and negative acknowledgement transport system;

c) a second transmitter ~~means~~ for transmitting ~~a predetermined number of~~ credits from said receiving node to said sending node when a predetermined ~~even~~ event occurs, said credits specifying a range of data sought to be received; and ~~d) means~~ for transmitting a

~~predetermined number of~~ negative ~~acknowledgements~~ acknowledgement from said receiving node to said sending node, when at least one transmitted ~~byte~~ datum is lost or corrupted.

Claim 58 (Currently Amended). The system of claim 57, further comprising:

~~e)~~ d) ~~means~~ a processor for processing said data stream by a transport system independent of credit and negative acknowledgements, if said predetermined identifier indicates a transport system that is not exclusively credit and negative acknowledgement based,

whereby compatibility at the application programming level of ~~a~~ the transport system independent of credit and negative acknowledgements protocol is maintained.

Claim 59 (Currently Amended). The system of claim 57, further comprising:

~~e)~~ d) a first packet filter for filtering data packets at a sending node; and

~~f)~~ e) a second packet filter for filtering data packets at a receiving node,

so that said predetermined identifier indicates a credit and negative acknowledgement transport system dependent on said first and second packet filters.

Claim 60 (Currently Amended). The system of claim 57, said first transmitter further ~~comprising: ) means for~~ retransmitting at least once, from said sending node to said receiving node, said lost or corrupted ~~bytes~~ datum corresponding to said ~~predetermined number of~~ negative ~~acknowledgments~~ acknowledgement received at said sending node.

Claim 61 (Currently Amended). The system of claim 57, ~~further comprising:~~

~~e) means for transmitting~~ wherein said ~~predetermined number of~~ credits transmitted from said receiving node to said sending node occurs before the transmission of said ~~predetermined number of bytes~~ amount of data of said ~~byte~~ data stream.

Claim 62 (Currently Amended). The system of claim 61, wherein said ~~means for~~ transmitting of said ~~predetermined number of~~ credits occurs during a connection establishment of said sending node and said receiving node.

Claim 63 (Currently Amended). The system of claim 61, wherein said ~~means for~~

transmitting of said ~~predetermined number of~~ credits occurs after a connection establishment of said sending node and said receiving node.

Claim 64 (Currently Amended). The system of claim 57, wherein said predetermined event is selected ~~one~~ from the group consisting of

a) a ~~predetermined number of bytes~~ specified amount of data from said ~~byte~~ data stream is received at said receiving node,

b) a ~~predetermined number of bytes~~ specified amount of data from said ~~byte~~ data stream is received at said receiving node and a congestion indicator at said receiver node is less than a predetermined threshold,

c) a ~~predetermined number of bytes~~ specified amount of data from said ~~byte~~ data stream is received at said receiving node and a data error indicator at said receiver node is less than a predetermined threshold,

d) a buffer at said receiving node, containing said ~~bytes~~ data transmitted from said sending node to said receiving node, has free space,

e) a buffer at said receiving node, containing said ~~bytes~~ data transmitted from said sending node to said receiving node, has free space and a congestion indicator at said receiver node is less than a predetermined threshold, and

f) a buffer at said receiving node, containing said ~~bytes~~ data transmitted from said sending node to said receiving node, has free space and a data error indicator at said receiver node is less than a predetermined threshold.

Claim 65 (Currently Amended). The system of claim 57, wherein the reception of said credits at said receiving node indicates that at least a subset of said ~~byte~~ data stream was correctly received at said receiving node.

Claim 66 (Currently Amended). The system of claim 57, wherein said ~~means for transmitting of said predetermined number of credits~~ second transmitter is dependent upon a counter exceeding a predetermined number representative of received ~~bytes~~ data at said receiving node, said ~~transmitting means~~ second transmitter ~~comprising~~:

i) ~~means for~~ transmitting a predetermined number of credits from said receiving

node to said sending node when said counter is equal to at least a predetermined value; and

ii) ~~means for~~ decrementing said counter by ~~said byte size~~ an amount of credits transmitted upon transmission of said credits.

Claim 67 (Currently Amended). The system of claim 57, wherein said credits from said ~~means for credit transmission~~ second transmitter are reduced or delayed to reflect congestion detection in an established connection.

Claim 68 (Currently Amended). The system of claim 57, wherein said ~~means for transmitting of said predetermined number of bytes~~ first transmitter is dependent upon a counter exceeding a predetermined number representative of received credits at said sending node, said ~~transmitting means~~ first transmitter ~~comprising~~:

~~e)~~ (i) ~~means for~~ transmitting said ~~bytes~~ data from said sending node to said receiving node when said counter is not exhausted ~~equal to at least said number of bytes~~; and

~~f)~~ (ii) ~~means for~~ decrementing said counter ~~by said number of bytes~~ based upon ~~said transmission of said bytes~~ an amount of data transmitted.

Claim 69 (Currently Amended). The system of claim 57, wherein said ~~bytes~~ data transmitted by said ~~byte transmission means~~ first transmitter are in ~~the~~ a form compatible with ~~of~~ Transmission Control Protocol (TCP) packets, whereby said system is compatible at the application programming level of TCP.

Claim 70 (Currently Amended). The system of claim 57, wherein the established connection between said sending node and said receiving node is established using ~~the~~ a standard 3-way handshake of Transmission Control Protocol (TCP).

Claim 71 (Currently Amended). The system of claim 57, ~~further comprising:~~

~~e) means for resetting~~ wherein said second transmitter resets said established connection when said transmission of at least one of said negative acknowledgements occurs a predetermined number of times.

Claim 72 (Currently Amended). The system of claim 57, wherein said ~~means for transmitting of said predetermined number of credits occurs by~~ second transmitter communicates credits by piggybacking existing traffic with said credits from said receiving node to said sending node.

Claim 73 (Currently Amended). The system of claim 57, wherein said credits in said ~~credit transmission means~~ second transmitter are not retransmitted if they are lost.

Claim 74 (Currently Amended). The system of claim 57, wherein said ~~predetermined number of~~ negative ~~acknowledgements~~ acknowledgement is transmitted based on at predetermined events.

Claim 75 (Currently Amended). The system of claim 57, wherein said at least one corrupted ~~byte~~ datum is detected by means of error detection hardware only.

Claim 76 (Currently Amended). The system of claim 57, wherein said at least one corrupted ~~byte~~ datum is detected only once by software error detection means.

Claim 77 (Currently Amended). The method ~~for quickly and reliably transmitting a byte stream as recited in~~ of claim 1, wherein said second unique range of ~~bytes~~ data is contiguous to said first unique range of data ~~bytes~~.

Claim 78 (Currently Amended). The method ~~for quickly and reliably transmitting a byte stream as recited in~~ of claim 1 ~~77~~, ~~the steps~~ further comprising the steps of:

d) at said sending node, upon receipt of said ~~credit~~ second information authorizing said second unique range of data ~~bytes~~, when said second unique range of data ~~bytes~~ is non-contiguous with a ~~first previous~~ prior received first unique range of data ~~bytes~~, sending ~~bytes~~ data of said ~~byte~~ data stream intermediate said ~~previous~~ first unique range of data ~~bytes~~ and said second unique range of data ~~bytes~~ as though credits specifically authorizing sending thereof were explicitly received at said sending node.

Claim 79 (Currently Amended). The method ~~for quickly and reliably transmitting a byte stream as recited in~~ of claim 78, ~~the steps~~ further comprising the step of:

e) when at least one transmitted ~~byte~~ datum is lost or corrupted, transmitting from said receiving node to said sending node a negative acknowledgement ~~(NAK)~~ identifying said at least one lost or corrupted datum ~~byte~~.

Claim 80 (Currently Amended). The method ~~for quickly and reliably transmitting a byte stream as recited in~~ of claim 79, the steps further comprising:

f) upon receipt of said negative acknowledgement ~~NAK~~ at said sending node, retransmitting at least once, from said sending node to said receiving node, only said at least one lost or corrupted ~~byte~~ datum identified thereby.

Claim 81 (Currently Amended). The method ~~for quickly and reliably transmitting a byte stream as recited in~~ of claim 1, ~~the steps~~ said releasing step further comprising:

~~f)~~ upon receipt of said ~~predetermined number of credits~~ first information authorizing transmission of ~~at least one of~~ said first unique range of data ~~bytes~~, and subsequent receipt of said second information defining said second unique range of data bytes, removing ~~a predetermined number of previously authorized and transmitted bytes~~ from a buffer at said sending node entries corresponding to said first unique range of data ~~means for transmitting~~.